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# United States Patent [19]

Hsu

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**[54] CIRCLE DRAWING TOOL**

[75] Inventor: Walter W. Hsu, Yinlin Hsien, Taiwan

[73] Assignee: Walter's Co., Ltd., Yonlin Hsien, Taiwan

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[58] Field of Search ..... 33/27.03, 562, 33/555.1, 555.2

## [56] References Cited

## U.S. PATENT DOCUMENTS

3,795,053	3/1974	Burke	.....	33/27.03
4,129,948	12/1978	Hatter et al.	.....	33/27.03
4,589,210	5/1986	Konrad	.....	33/27.03
4,899,449	2/1990	Fouladian	.....	33/27.03
5,125,161	6/1992	Guthrie	.....	33/27.03
5,384,964	1/1995	McKay	.....	33/27.03
5,390,418	2/1995	Buono et al.	.....	33/27.03
5,615,485	4/1997	Stoneberg	.....	33/562

## FOREIGN PATENT DOCUMENTS

2806617	8/1978	Germany	.....	33/27.03
3134890	3/1983	Germany	.....	33/27.03
564645	10/1944	United Kingdom	.....	33/27.03

Primary Examiner—Diego Gutierrez

Assistant Examiner—Quyen Doan

Attorney, Agent, or Firm—Browdy and Neimark

## [57] ABSTRACT

An improved circle drawing tool is equipped with a doughnut-shaped outer board, a circular slide track mounted onto the outer board and an inner circular board provided with rolling balls in a plurality of receiving cavities thereof and having such a diameter that it can be rotarily engaged with the slide track as well as the doughnut-shaped outer board in assembly. On the doughnut shaped outer board are disposed a plurality of round holes distributed one by one consecutively according to their diameters. The are 4 straight lines separated apart at 90 degrees in angle. There are a number of small pen insertion holes consecutively spaced by 4 mm on each line and each starting point of the four lines is 1 mm farther away from the center of the outer board. There are 10 radial lines equally divided on the inner circular board. On each radial line there are a plurality of consecutive pen insertion holes defined thereon with every two neighboring points 10 mm spaced apart. Each starting point of all the 10 lines is 1 mm farther away consecutively from the center of the circular board so as to make the pen insertion holes distributed within a certain range in 1 mm divisional level. An extension arm having a plurality of pen insertion holes can be connected to the rotary outer board so as to permit circles larger than the diameter of the outer board can be drawn.

3 Claims, 4 Drawing Sheets

